

Application No. 09/932,622
Submission for Request for Continued Examination and Response to Final Office Action

REMARKS

This is a submission for a Request for Continued Examination and Response to Final Office Action in response to the final office action dated June 16, 2005.

Claim 8 has been amended to change “gas” to “partially purified smoke” as required by paragraph 3 of the office action. Basis is provided by, for example, page 16, line 19, of the specification.

Claims 1, 3, 18, 104, 106 and 108 have been amended to reflect that the animals are alive, consistent with the species and sub-species elected, as noted in paragraph 7 of the office action.

Claims 1-4 and 106-109 have been amended to state that the treatment gas is introduced through water, as required by paragraph 6 of the office action. Basis is provided by page 16, line 20, of the specification.

Claim 2 has been amended to indicate that the treatment fluid is entrained in water for clarity, as required by paragraph 15 of the office action. Basis is provided by, for example, page 17, line 1, of the specification.

Claim 3 has been amended to change “fluid” to “water”, as required by paragraph 8 of the office action. Basis is provided by, for example, page 17, lines 1-3, of the specification.

Claims 2, 3, 103, 104, 107 and 108 have been amended to change or delete “said introducing step” to address the lack of antecedent basis noted in paragraph 14 of the office action.

Claims 4, 105 and 109 have been amended to delete reference to a “liquid” as required by paragraph 9 of the office action, and to refer to water (as noted above in the amendment in response to paragraph 6 of the office action).

Claims 103 and 107 have been amended to change “treatment fluid” to “water containing partially purified smoke”, as required by paragraph 10 of the office action. Basis is provided by, for example, page 16, lines 17-20, of the specification.

Claims 104 and 108 have been amended to change “fluid” to “water” as required by paragraph 11 of the office action.

Claims 4, 105 and 109 have been amended to specify in the introducing step that the treatment gas includes smoke, to make these claims more definite, as required by paragraph 17 of the office action.

The introducing step has been deleted from claims 103, 104, 107 and 108 to make these claims more definite, as required by paragraphs 17 and 18 of the office action.

Claims 1, 4, 18, 105, 106 and 109 have been amended to introduce a limitation that the gas is introduced by breathing water to overcome the novelty rejection as discussed in the interview described below.

In the office action, claim 8 was objected to as being of improper dependent form; claims 1-4, 6-7, 9-11, 13, 14, 17, 18, 20, 24 and 103-109 were rejected as non-enabled; claims 2, 3, 4, 103-105, 107, 108 and 109 were rejected as indefinite; claims 1, 4, 6, 7, 9-14, 18, 105, 106 and 109 were rejected as anticipated by Yamaoka (JP 09-149761 A); claims 17 and 24 were rejected as obvious over Yamaoka in view of Iimura (JP 61141835A) and Kowalski (US 5972401); claims 2, 103 and 107 were rejected as obvious over Yamaoka in view of Iimura; and claims 3, 104 and 108 were rejected as obvious over Yamaoka in view of Kowalski and Iimura.

The enablement and indefiniteness rejections have been addressed by the amendments made above. It is respectfully submitted that paragraph 7 of the office action was clearly erroneous in asserting that “the originally filed disclosure did not describe or even suggest the

use of water and membranes for purification of a smoke material in a dead animal. . ." because, for example, page 16, lines 22-27, state that the procedure can be conducted after the animal is dead ("or is artificially respiration and pumped through a recently killed animal").

The rejection of claims 1, 4, 6, 7, 9-14, 18, 105, 106 and 109 as anticipated by Yamaoka must be withdrawn. Yamaoka is clearly directed to injecting a fluid directly into the circulatory system of a fish, as stated in paragraph 22 of the office action, thus bypassing the respiratory system and membranes of the fish. The first sentence of paragraph 27 of the office action recognizes that Yamaoka requires an injection step, as does the penultimate sentence of paragraph 30. Accordingly, Yamaoka cannot meet the limitations of these claims that the treatment gas pass through the respiratory system of the fish, or be filtered by the membranes of the fish.

The rejections of claims 17 and 24 as obvious over Yamaoka in view of Iimura and Kowalski; claims 2, 103 and 107 over Yamaoka in view of Iimura; and claims 3, 104 and 108 over Yamaoka in view of Kowalski and Iimura must be withdrawn because combining Yamaoka and Iimura would destroy the function of Iimura.

Yamaoka specifically teaches cutting open the heart and injecting a fluid into the main arteries leading from the heart (see paragraphs 0017, 0028, 0029, 0030 and 0063) so that the fluid can be carried throughout the body and replace the blood (see paragraphs 0064-0065 and 0067-0068). This is confirmed because Yamaoka also indicates that blocked capillaries by larger bubbles are a problem (paragraph 0020), teaches use of an anti-coagulant (paragraph 0019), and discloses circulating fluid with a volume equivalent to the blood volume of the fish in one minute (paragraph 0023). By contrast, Iimura discloses the inhalation of carbon monoxide and subsequent circulation of the carbon monoxide in the body of the animal through the circulatory

system. Cutting open the heart and replacing the blood, as taught by Yamaoka, would destroy the function of Iimura's teachings that the heart circulates Iimura's inhaled carbon monoxide in the blood throughout the body. In other words, Yamaoka's destruction of the heart and replacement of the blood destroys Iimura's use of the heart to pump blood containing carbon monoxide throughout the body. Thus, Paragraph 27 of the office action is clearly erroneous in asserting that the combination of Yamaoka and Iimura would be "substituting one method of introducing a gas into the blood stream of an alive fish for another . . ." because Yamaoka removes the blood stream and substitutes a fluid (paragraph 0017 and 0023), and Yamaoka cuts open the heart, which inevitably kills the fish (contrary to the statements in the office action that Yamaoka teaches injecting smoke into a live fish, such as in paragraph 0027 and 0029). Yamaoka teaches invasive heart surgery (tricky and difficult), and Iimura teaches non-invasive inhalation, which are completely different and non-analogous arts.

Further, the combination of Kowalski and Iimura would destroy the function of Iimura. Iimura is directed to making the color of meat bright red, brighter than untreated meat, and to maintain that unnaturally bright color even after the meat is many days old. Page 3, third to last paragraph, last sentence, of Iimura states "The color will not change to brown even when the fish is left in the air for several days." Page 4, third paragraph, second sentence, states that "That raw meat was brighter red than the raw meat of a rabbit that was not made to inhale carbon monoxide." Page 4, second paragraph, last sentence, of Iimura states "Moreover, when that raw meat was stored in a refrigerator at 0°C-3°C, the color did not change to brown even after fourteen (14) days." Page 4, last paragraph, last sentence, of Iimura states "Even after twenty (20) days had passed in a refrigerator at a temperature of 0°C-5°C, hardly any color change was noted."

By contrast, Kowalski is directed to a process to preserve (not enhance or alter) the appearance of the meat and to allow natural decomposition after thawing. Column 3, lines 60-63, of US Patent 5,972,401 to Kowalski states that the goal of Kowalski is to “achieve a similar look to fresh seafood after the seafood is frozen and thawed.” Column 4, lines 14-17, and column 22, lines 37-45, of Kowalski teach that Kowalski’s process results in a product that undergoes normal decomposition after thawing. Page 5, first paragraph, last sentence, of Imura states that “taste, smell, and other food product quality attributes were not found to have been compromised at all”, but it is not stated how long the fish meat had been thawed after freezing (or maintenance at 0°C - 5°C).

Further, combining Yamaoka and Kowalski would destroy the function of Kowalski. Yamaoka specifically teaches the use of sodium chloride, which affects the flavor (see paragraph 0071, although paragraph 0019 states a saline taste is not desirable), while Kowalski is directed to preserving the natural flavor of the meat (see Abstract).

Moreover, there is no teaching, suggestion or incentive to combine Yamaoka with either or both of Imura or Kowalski, so that their combination is impermissible hindsight reconstruction.

Finally, it must be noted that Paragraph 25 of the office action is clearly erroneous in asserting that Yamaoka teaches introducing water entrained with partially purified smoke through both respiratory and circulatory systems: the last sentence of paragraph 25 of the office action states “Yamaoka et al. are silent in teaching the water with the smoke inspires during ventilating . . .”; the last sentence of paragraph 29 of the office action states “Yamaoka et al. are silent in teaching the animal inhales the water/gas dispersion, or treatment fluid”; and the last

sentence of paragraph 32 states "Yamaoka et al. are silent in teaching the gas diffuses a compound *through* the respiratory system and *into* the blood."

The courtesy of a telephone interview with the Examiner and his Supervisory Primary Examiner, Milton Cano, is gratefully acknowledged. During the interview, the above amendment and arguments were discussed.

It was agreed that adding "by breathing of said water" to the claims subject to the 102 anticipation rejection would distinguish away from the Yamaoka primary reference and would also distinguish away from aerosolizing water and smoke for treating a land animal, which would be outside the scope of the prior restriction requirement.

It was further agreed that the 103 obviousness rejection would be withdrawn because combining the Yamaoka primary reference with the Iimura secondary reference would destroy the function of Iimura, and also because they are from non-analogous arts. Yamaoka teaches cutting open the heart and removing the blood, substituting a treatment fluid containing smoke for the blood, while Iimura teaches bubbling carbon monoxide in water which the fish breathe in, so that the carbon monoxide is circulated in the blood. The cutting open of the heart and removal and substitution of blood required by Yamaoka would destroy the function of Iimura, which requires that the heart pump blood carrying carbon monoxide throughout the fish. Further, a person having ordinary skill in the art of Yamaoka's cutting the heart and removing and substituting the blood would not look to the blood circulating art of Iimura because the arts are not analogous. The Yamaoka process is similar to the process of preserving Egyptian mummies, namely, draining blood and substituting preserving fluid for the blood. It was agreed that a person having ordinary skill in preserving mummies would not look to the art of having living persons breathe a gas to introduce the gas into the person's circulating blood. It was also

noted that claims 17 and 24 are dependent on allowable claims, and therefore would be allowable, and that the other two sets of claims with 103 rejections all recite blood.

It was further agreed that the above amendments and the additional limitation of "by breathing of said water" would overcome the section 112, paragraph 1, rejection described in paragraph 7 of the office action because it implies the animal is alive.

It was further agreed that the above amendments and the additional limitation of "by breathing of said water" and the change of "fluid" to "water" would overcome the section 112, paragraph 2, rejections.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance. Allowance of the claims at an early date is earnestly solicited. If the claims would be in condition for allowance except for minor revisions, Applicant's attorney courteously invites a telephone interview initiated by the Examiner so that such revisions can be effected by Examiner's amendment.

Respectfully submitted,

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